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WEST FORK ECONOMIC GROWTH CENTER

GALLATIN COUNTY, MONTANA

A Background Economic Study
1960-1970

Prepared for the
State of Montana
Department of Highways
Planning and Research Bureau
in cooperation with the
U. S. Department of Transportation
Federal Highway Administration

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The opinions, findings, and conclusions expressed in this publication are those of the author and not necessarily those of the State of Montana - Department of Highways or the Federal Highway Administration.

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PREFACE

This document represents the study effort for the "Before" study of the West Fork Economic Growth Center. As officially designated, the study area includes only the small portion of land in the vicinity of the West Fork of the West Gallatin River, located off U.S. Highway 191, Gallatin County, Montana, which is the site of the Big Sky of Montana Recreation Development. This area will undoubtedly experience rapid economic growth; it could do nothing but grow when the permanent population of the West Fork prior to the announcement of Big Sky was three and economic activities were limited to some logging and a small cattle and dude ranching operation. The question arises whether or not a study confined to this area is meaningful as a basis for analysis of the economic impact of Big Sky.

Growth center studies purportedly provide base-line data from which to examine the impact of growth on the "community." In order to examine any such impact, the "community" must be defined and its structure examined in relation to the official growth center. By definition, a "community" is a group of people with common interests: social, cultural, and economic. At the present time, the vast majority of Gallatin Canyon residents transact business, purchase goods and services, and attend social events in Bozeman. Their interests are closely tied to this city; Bozeman serves as an economic, cultural, and social "center." In effect, the people who live in the Canyon are residents of the Bozeman community. Bozeman is also the "center" for Gallatin County.

Because Bozeman and the Canyon are so closely related, any study which is to present a realistic picture of the impact of Big Sky must necessarily include an analysis of the economic situation in Bozeman. In addition, since one can expect that there might be an obvious and measurable change in economic indicators in Gallatin County, it is certainly desirable to include county-wide analysis in many cases. Thus, the study will, in most instances, be based on county statistics, with a comparative analysis of the situations in Bozeman and the Gallatin Canyon. These clearly bounded areas meet the tests of economic and social unity and geographic separation from other areas. In addition, they offer the convenience of published economic and demographic statistics to aid in measurement.

A portion of the Big Sky development is located in Madison County. Since the development is separated from the rest of the county by mountains, most economic benefits are likely to be indirect and certainly beyond the scope of this study. However, residents of Madison County will be directly affected through the generation of additional property taxes on that portion of Big Sky which is located in the county. Thus, an analysis of impact in Madison County with respect to the property tax structure will be included.

In general, economic growth center designations have been applied to previously established municipalities which have shown a more rapid growth than the surrounding area or region. Obviously, the West Fork Growth Center does not conform to this standard. For this reason, it is not possible to conform to the standard outline for growth center studies in all instances. However, insofar as is possible, this study

will follow the established guidelines to permit its use in an analysis of the national program.

Since the major purpose of this study is to establish a base from which to measure the changes in economic activity, the study will contain an economic and social inventory of the area with data assembled for the base year of 1970. This time period has been chosen for two reasons:

1) Although Big Sky had officially begun construction, very little actual building was done, and 1970 is essentially the last year in which there was no impact potentially attributable to the development;

2) Large amounts of very accurate data are available for this year, primarily from the U.S. Bureau of the Census and from interviews conducted in Gallatin Canyon in the summer of 1970 by the Gallatin Canyon Study Team.

To establish present growth rates and to estimate past performance of the area, data from 1960 and/or 1965 will be used in conjunction with the base-line data. However, these will probably be of little value as guidelines for prediction as it is estimated that the structure of the area may be radically altered. Consequently, there will be many cases in which we simply do not yet have the necessary data to attempt standard projections.

CHAPTER I

INTRODUCTION

The Big Sky Development is advertised as a 19-million dollar year-round recreation complex, proposed by Chrysler Realty Corporation and Chet Huntley. Publically announced in February, 1970, project plans envision two self-contained population centers, one primarily for winter use and one for summer use, with a maximum population of about 10,000 people. Construction work was begun in the summer of 1970 and it is estimated that most major facilities will be completed by the fall of 1973.

The site selected for Big Sky is a semi-primitive area below Lone Mountain on the West Fork of the Gallatin River in southwestern Montana. The Mountain Village will be located at the base of Lone Mountain, approximately 10 miles up the West Fork of the West Gallatin River from U.S. Highway 191. At the time of this report, the exact location has not yet been determined, pending the outcome of a land exchange between the U.S. Forest Service and the Burlington Northern Railroad. The winter village will cater primarily to skiers. Ski lifts and trails are to be cut out of the heavily wooded north-facing slopes of Lone Mountain and adjacent Andesite Peak. Base facilities will include restaurants; shops; and overnight accommodations in hotel, hostel, and condominium units. Additional recreation will include ice skating and indoor swimming.

The Meadow Village will occupy the open valley about two miles up the West Fork. This area is primarily organized around summer-time recreation activities. One of the major attractions will be the 18-hole golf course

which surrounds the village area. Additional plans include tennis courts, volleyball courts, a swimming pool, and trap and skeet shooting and archery ranges.

In addition to the two villages, the Lone Mountain Guest Ranch, located above the Meadow Village, houses guests on a weekly basis for dude ranching and pack trips.

Although the resort is not yet completed, a number of facilities are currently in operation or will soon be. The guest ranch had been in business for a number of years before Big Sky, Inc. purchased it. At the present time, it is open for dude ranching. In addition, its facilities are being used for meetings and seminars. Several facilities in the Meadow Village are expected to open on a limited basis this summer: the commercial area, including a small convention center with facilities to accommodate 200, a general store, a gas station, and employee housing should be completed in early July; the first tract of condominiums is completed and ready for occupancy; tennis and volleyball courts are under construction; and the golf course should be playable in the fall.

Big Sky of Montana, Inc. is a Delaware corporation dealing in land development and as such will be marketing homesites and condominiums. Essentially, the development will create a new recreation town, designed to attract buyers who will use these facilities. The majority of buyers will not be permanent residents of the area. Rather, they will be people interested in a second home, both as a place to vacation and as an investment which can be leased or rented to other vacationers.

The complex is located in a relatively unsettled area. Prior to the announcement of Big Sky, the permanent population of the West Fork was

three people. The remainder of the Canyon, a 40 to 50 mile long strip of land, exhibits the same sparse settlement pattern, with a total population of approximately 150. According to a survey taken by the Gallatin Canyon Study Team, most of these people live in the area because of its natural beauty and rural setting.

There has been very little past economic activity in this area, and that which has transpired has been largely based on recreation and tourism. Many of the permanent residents are either commuters to Bozeman or retired persons. The remainder are primarily proprietors or employees of Canyon businesses. In 1970, there were 10 business establishments, with a total annual volume of business less that $100,000 per establishment.

The economy in the remainder of the county is substantially more dynamic. Gallatin County is one of the faster growing areas in Montana.[1/] Much of this growth has been exhibited by the city of Bozeman, which has had healthy increases in both population and employment. The area has a recent history of rapid development and indications point to more of the same in the future. Light industrial activity is expected to increase, along with service and trade sectors. Montana State University, located in Bozeman should continue to make a significant contribution to the local economy.

An additional factor is the nation-wide increase in demand for recreation. Gallatin County is located in an area of great natural beauty with facilities for fishing, hunting, camping, and other outdoor activities. Developers at Big Sky are seeking primarily to capitalize on these aspects of location.

CHAPTER II

ECONOMIC BASE ANALYSIS

Analysis of the economic base of an area provides an overview and understanding of those factors primarily responsible for employment and income levels in the area. By examining these statistics, researchers can identify economic strengths and weaknesses of the area.

Economic base statistics are mainly comprised of information on employment and industry structure. The major industries are divided into primary and derivative classifications. The primary sector represents the major export industries (those which market beyond the boundaries of the area, or, in the case of Federal and State governments, industries in which the paychecks come from outside the area). Derivative industries are those which serve the workers in both the primary sector and the derivative sector. Goods and services produced in this sector pass to the local market.

EMPLOYMENT

One direct measure of economic activity is employment. Total employment in Gallatin County increased markedly in the decade between 1960 and 1970. As shown in Table 2-1 below, county-wide employment rose by 31.7%. Much of this employment increase was experienced in the city of Bozeman, which showed a 42.9% gain, while in the remainder of the county employment increased only 16.3%

Table 2-1

NUMBER OF EMPLOYED PERSONS

AGE 14 AND OVER[2/]

	1960	1970	Percent Change
Gallatin County	9,365	12,329	31.7
Bozeman	4,968	7,097	42.9
Remainder of County	4,497	5,232	16.3

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, Montana, 1960 and 1970.

However, during this same period, the size of the labor force has grown at a faster rate than available jobs. Shown below are unemployment figures for the county, state and nation.

Table 2-2

COMPARATIVE UNEMPLOYMENT

1960 and 1970

	Unemployment 4/1/60		Unemployment 4/1/70		
	No.	Percent	No.	Percent	Percent Change
Males, 14 and over:					
Gallatin County	249	3.7	417	5.0	1.3
State	11,511	6.6	9,800	5.8	-0.8
Nation (000)	2,486	5.4	1,981	3.9	-1.5
Females, 14 and over:					
Gallatin County	131	4.2	293	6.2	2.0
State	5,292	7.2	6,241	6.8	-0.4
Nation (000)	1,366	5.9	1,571	5.0	-0.9
Total, 14 and over:					
Gallatin County	380	3.9	710	5.4	1.5
State	16,803	6.8	16,041	5.8	-0.6
Nation (000)	3,852	5.5	3,552	3.9	-1.2

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1960 and 1970.

Although Gallatin County has shown generally lower unemployment rates than those for the state as a whole, it should be noted that the unemployment rate in the county has risen during the decade, while rates in the state and nation have declined. Unemployment among women is especially high. This is probably due in part to the rapid increase in enrollment at Montana State University, which has resulted in an increased number of student wives seeking employment.

One important factor in employment is the race, sex and age distribution of the employed. Gallatin County has a very small non-white population. Most of this population can be attributed to the black and Asian students who attend MSU, and their families. Therefore, data on racial composition of the employed is not particularly relevant in this case. Figures on age distribution of the employed are not readily available. However, data on age distribution of the labor force have been published by the U.S. Bureau of the Census and will be included in Chapter III. Sex composition of the employed in Gallatin County is shown in Table 2-3 below.

Table 2-3

EMPLOYMENT BY SEX

GALLATIN COUNTY, 1960 and 1970[3/]

	1960		1970	
	Male	Female	Male	Female
Total Population	9,647	8,839	12,288	11,577
Labor Force	6,692	3,094	8,198	4,679
Percent of Total	69.4	35.0	66.7	40.4
Armed Forces	41		44	5
Civilian Labor Force	6,651	3,094	8,154	4,674
Employed	6,402	2,963	7,744	4,385
Unemployed	249	131	410	289
Percent of Unemployed	3.7	4.2	5.0	6.2
Not in Labor Force	2,955	5,745	4,090	6,898

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, Montana, 1960 and 1970.

Another good indicator of the state of the economy is provided by data on employment by industry. As mentioned, industries may be divided into two categories: primary and derivative. It is primary industry which serves as the economic base, providing the leverage to generate new employment and income. Employment in the derivative sector depends upon the operation of the primary sector. Because of this dependent relationship, primary industry has a multiplier or spread effect. For each new job created in the primary sector, "x" new jobs more or less automatically appear in the derivative sector which services the area. The employment multiplier is calculated from employment data as 1 + x, where "x" equals the ratio of derivative employment to primary employment. Thus, the net effect of each new primary job is the creation of 1 + x total jobs. Employment figures and the multiplier for Gallatin County are detailed in Table 2-4. (See page 8.)

The employment multiplier in the county has been approximately 2.2, a figure which is low when compared to state and national multipliers of 2.51. In addition, the data available for use in determining these multipliers is limited in scope and there is no adequate method by which to determine which proportion of activity in each industry is intended for the local market and which proportion for "export". Thus, the classifications are only approximate. It is estimated that any bias in this particular instance would tend to push the multiplier upward. There are two major reasons for the bias: the first is the large student population (8,113 in 1971) and the second is the tourist trade. Both of these groups bring in money which should tend to create employment in the derivative sector (especially in retail trade and service industries) apart from that created by primary employment.[4/]

Table 2-4

PRIMARY AND DERIVATIVE EMPLOYMENT

GALLATIN COUNTY, 1960 and 1970

	1960	1970	Change, 1960-1970 No.	Change, 1960-1970 Percent
Primary Employment				
Agriculture, Forestry, and Fisheries	1,493	1,175	-318	-21.3
Mining	21	6	- 15	-71.4
Manufacturing	830	777	- 53	- 6.4
Railroad	180	234	54	30.0
Federal and State Government	1,672	3,323	1,651	98.7
Total Primary Emp.	4,196	5,515	+1,319	
Derivative Employment				
Contract Construction	498	696	198	39.8
Transportation and Public Utilities	427	408	-19	-3.1
Wholesale Trade	277	320	43	15.5
Retail Trade	1,599	2,231	632	39.5
Finance, Insurance and Real Estate	250	419	169	67.6
Services	1,376	1,678	302	21.9
Local Government	556	862	306	55.0
Total Derivative Emp.	4,983	6,614	1,631	
Total Employment	9,179 5/	12,129	2,950	
Multiplier	2.19	2.20		

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, Montana, 1960 and 1970.

The low multiplier is probably the result of a relatively stable economy and reflects the inability of local derivative businesses to attract customers from outside the area, thus preventing it from becoming a regional trade center such as Billings or Great Falls.

Changes in employment by major industry should give decision-makers a feel for the direction of trends in the economy. Table 2-5 shows these figures for the decade 1960-1970.

Table 2-5

MAJOR EMPLOYERS BY INDUSTRY

GALLATIN COUNTY, 1960 AND 1970[6/]

	1960		1970		Change	
	No.	% of Total	No.	% of Total	No.	% of Total
Agriculture, Forestry and Fisheries	1,493	15.9	1,175	9.7	-318	-6.2
Manufacturing and Mining	851	9.1	778	6.4	- 73	-2.7
Wholesale and Retail Trade	1,876	20.0	2,551	21.0	675	1.0
Service	1,376	14.7	1,678	13.8	302	0.9
Federal and State Government	1,672	17.9	3,323	27.4	1,651	9.5
All Others	2,097	22.4	2,624	21.6	527	-0.8

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1960 and 1970.

As in many areas, the agricultural base in Gallatin County has shown a steady decline both in absolute and relative terms. In 1950, 1,856 people, or 23.2% of all employees were employed in agriculture. By 1970, these figures were 1,175 and 9.7% respectively. This trend is expected to continue, especially in view of the fact that there has been a relatively large amount of activity in the land market in recent years and many localities in the

county have seen productive agricultural land turn into "rural subdivisions." With the declining agricultural base, Gallatin County will have to look to other primary industries. Although manufacturing decreased during the decade, light industrial activity appears to be on the rise over the last few years. Employment by Federal and State agencies is also increasing. In addition, the area has excellent recreation facilities which could contribute to a healthy economy.

INDUSTRY STRUCTURE

In the past, like much of the state, Gallatin County's economic base has been heavily agricultural. Another major economic asset has been the presence of Montana State University. Analysis of these and other industries will indicate some of the major trends in recent years. Tables 2-6 and 2-7 detail industry structure in Gallatin County

Table 2-6
INDUSTRY STRUCTURE
GALLATIN COUNTY

Manufacturing[2]	1963	1967	Percent Change
Total Number of Establishments	53	50	-5.7
Number of Establishments With 20 or More Employees	11	12	-9.1
Total Number of Employees	790[1]	700	-11.4
Total Payroll (1,000)	3,900[1]	4,000	2.6
Value Added by Manufacture (1,000)	9,500[1]	8,000	-15.8
Value of Shipments (1,000)		19,200	
New Capital Expenditures (1,000)	2,300[1]	700	-69.6

Wholesale Trade[3]	1963	1967	Percent Change
Number of Establishments			
Gallatin County	49	51	+4.1
Bozeman	23	25	8.7
Remainder of County	26	26	0.0

Wholesale Trade continued	1963	1967	Percent Change
Number of Paid Employees			
Gallatin County	199	248	+24.6
Bozeman	154	184	19.5
Remainder of County	45	64	+42.2
Total Annual Payroll ($1,000)			
Gallatin County	919	1,450	+57.8
Bozeman	661	1,089	+64.8
Remainder of County	258	361	+39.9
Total Sales ($1,000)			
Gallatin County	18,816	23,124	+22.9
Bozeman	13,263	11,906	-10.2
Remainder of County	5,553	11,218	+102.0

Retail Trade[4]	1963	1967	Percent Change
Number of Establishments			
Gallatin County	321	357	+11.2
Bozeman	183	218	+19.1
Remainder of County	138	139	+0.7
Number of Paid Employees			
Gallatin County	1,437	1,644	+14.4
Bozeman	1,122	1,358	+21.0
Remainder of County	315	286	-9.2
Total Annual Payroll ($1,000)			
Gallatin County	5,102	6,242	+22.3
Bozeman	4,223	5,207	+23.3
Remainder of County	879	1,035	+17.7
Total Sales ($1,000)			
Gallatin County	42,275	52,456	+24.1
Bozeman	33,630	41,363	+23.0
Remainder of County	8,645	11,093	+28.3

Selected Services[5]	1963	1967	Percent Change
Number of Establishments			
Gallatin County	247	205	-17.1
Bozeman	106	98	-7.5
Remainder of County	141	107	-24.1
Average Number of Paid Employees			
Gallatin County	377	355	-5.8
Bozeman	236	256	+8.5
Remainder of County	141	99	-29.8

Selected Services continued	1963	1967	Percent Change
Total Annual Payroll ($1,000)			
Gallatin County	1,011	1,296	+28.29
Bozeman	601	838	+39.4
Remainder of County	410	458	+11.7
Total Receipts ($1,000)			
Gallatin County	5,377	5,793	+ 7.7
Bozeman	2,821	3,368	+19.4
Remainder of County	2,556	2,425	- 5.1

[1]Rounded in keeping with procedure for 1967 reporting.

[2]Source: U.S. Bureau of the Census: Census of Manufactures, Area Statistics, 1963 and 1967.

[3]Source: U.S. Bureau of the Census: Census of Wholesale Trade, Area Statistics, 1963 and 1967.

[4]Source: U.S. Bureau of the Census: Census of Retail Trade, Area Statistics, 1963 and 1967.

[5]Source: U.S. Bureau of the Census: Census of Retail Trade, Area Statistics, 1963 and 1967.

Table 2-7

BREAKDOWN OF SELECTED SERVICES -

NUMBER OF ESTABLISHMENTS

BY KIND OF BUSINESS GROUP

	Gallatin County			Bozeman		
	1963	1967	Percent Change	1963	1967	Percent Change
Hotels, Motels, Tourist Courts, Camps	99	87	-12.1	20	22	+10.0
Personal Services	65	56	-13.8	40	39	- 2.5
Miscellaneous Business Services	19	13	-31.6	15	10	-33.3
Auto Repair, Auto Services, Garages	31	14	-54.8	16	8	-50.0
Miscellaneous Repair Services	19	18	- 5.3	9	12	+33.3
Motion Pictures	3	5	+66.7	1	1	0.0
Other Amusement, Recreation Services	11	12	+ 9.1	5	6	+20.0

Source: U.S. Bureau of the Census: Census of Selected Services, Area Statistics, 1963 and 1967.

Although agriculture has been declining as a source of employment, cash receipts continue to remain up. Table 2-8 shows agricultural cash receipts for 1968 and 1969.

Table 2-8

AGRICULTURAL CASH RECEIPTS

GALLATIN COUNTY, 1968 AND 1969

	1968	1969
Livestock and Livestock Production	10,017,800	12,916,900
Crops	4,763,500	4,885,900
Total From Marketing	14,781,300	17,802,800
Government Payments	1,472,000	1,576,600
All Cash Receipts	16,253,300	19,379,400
Cash Receipts per Farm	18,899	22,853

Source: Montana Department of Planning and Economic Development; 1970 Montana Data Book.

However, as mentioned above, the agricultural base is expected to decline over the next decade or so.

One of the prime components of the economy of Gallatin County has been Montana State University. The University has enjoyed rapid and continued growth. This growth is expected to continue at a less rapid rate, with a probable leveling off around 1980. Actual and projected enrollments for the period 1963 to 1980 are shown in Table 2-9 below.

Table 2-9

ENROLLMENT AT

MONTANA STATE UNIVERSITY

	1963	1967	1971	1975*	1980*
Students	4750	6748	8113	8549	8663

*Projected
Source: Office of the Registrar, Montana State University.

Business activity in Gallatin Canyon itself has been rather limited. This is a rural area, which has been primarily dependent on tourist trade, with a small amount of agricultural activity. In 1970, there were 10 business establishments, of which 5 were strictly "dude ranches." The others were combinations of cabins, bars, gas stations, and other minor services. One has spaces for campers and trailers. These businesses employ a total of about 85 people during the peak two months, using mostly local help and college students. Annual volume of business for those reporting was less than $100,000 per establishment.

OTHER ECONOMIC INDICATORS

In addition to industry and employment figures, there are several other indicators as to the economic condition of a community.

Financial Resources

An indication of financial resources available within the community is provided by information on bank resources and property valuation.

Bank Resources

Gallatin County currently has eight banks. A summary of bank resources is shown in Table 2-10.

Table 2-10

SUMMARY OF BANK RESOURCES
GALLATIN COUNTY, 1969 AND 1970

City	Bank	Total Resources 1969	Total Resources 1970
Bozeman	First National	$31,533,780	$38,933,655
	Security Bank & Trust	26,152,404	29,354,348
	Montana National	7,453,439	8,999,056
	Western Bank*		679,464
Manhattan	Manhattan State	4,803,858	5,206,717
Three Forks	Security of Three Forks	2,090,738	2,095,071
Belgrade	Belgrade State	1,940,151	2,115,780
West Yellowstone	First Security	1,574,964	1,686,092
TOTAL		$75,549,334	$89,070,183
State of Montana		$1,680,405,546	$1,867,359,562
Percent of State		4.5	4.8

*Opened for business 1970.
Source: Office of the Superintendent of Banks, Helena, Montana.

In 1970, these eight banks listed financial resources at approximately 89 million dollars, 4.8 percent of the total for the state. Each of these banks has shown significant growth. In addition, the share of the state's total resources owned by financial institutions in the county has grown from 4.5 percent to 4.8 percent. These facts would seem to indicate that the county has a rather healthy economic situation.

Property Valuation

The value of property in the county is another indicator of financial resources. The assessed and taxable valuation of property in Gallatin County increased both absolutely and as a percentage of the state in the time period between fiscal years 1969 and 1970, (Table 2-11).

Table 2-11

ASSESSED AND TAXABLE PROPERTY VALUATION

GALLATIN COUNTY

	Valuation, 1968-9		Valuation, 1969-70	
	Assessed	Taxable	Assessed	Taxable
Gallatin (000)	$ 95,529	$ 27,373	$ 101,242	$ 28,973
State (000)	3,000,545	872,458	3,109,221	917,111
Percent of State	3.2	3.1	3.3	3.2

Source: Montana Department of Planning and Economic Development, 1970 Montana Data Book.

Local Government Finances

The financial position of the local government determines both the quantity and quality of services which that government is able to provide. Tables 2-12 through 2-14 show government revenues and expenditures.

Table 2-12

GENERAL REVENUE ($1,000)

GALLATIN COUNTY, 1966-1967

	Gallatin County	State
Intergovernmental		
Total*	1,212	37,654
From State Government	1,209	33,192
From Local Sources		
Total Revenues	5,341	148,284
All Taxes	3,780	119,995
Property Taxes	3,567	114,090
Total, All Sources	6,553	185,942

*Excluding water.

Source: U.S. Bureau of the Census: Census of Governments, Compendium of Finances, 1967.

Table 2-13

VALUATION AND PROPERTY TAXES LEVIED,

BY PURPOSE, 1968-69 AND 1969-70

	Valuation ($1,000)	
	Assessed	Taxable
1968-69		
Gallatin County	95,529	27,373
State	3,000,545	872,458
Percent of State	3.2	3.1
1969-70		
Gallatin County	101,242	28,973
State	3,109,221	917,111
Percent of State	3.3	3.2

	Property Taxes Levied ($1,000)				
	County	Public Schools	City and Town	State Property and Miscellaneous	Total
1968-69					
Gallatin	923	3,089	706	257	4,974
State	31,968	80,607	20,533	12,351	145,460
Percent of State	2.9	3.8	3.4	2.1	3.4
1969-70					
Gallatin	929	3,482	780	278	5,469
State	34,937	88,860	22,342	13,124	159,264
Percent of State	2.7	3.9	3.5	2.1	3.4

Table 2-14

DIRECT GENERAL EXPENDITURE

BY FUNCTION, 1966-67 ($1,000)

	Education	Highways	Public Welfare	Health & Hospitals	Total*
Gallatin	3,363	502	45	63	6,402
State	101,967	20,917	4,291	6,160	180,939
Percent of State	3.3	2.4	1.0	1.0	3.5

*Excluding water supply.

Source: U.S. Bureau of the Census: Census of Governments, Compendium of Government Finances, 1967.

Property taxes in Gallatin County are slightly higher than those for the state as a whole (Table 2-13). Of expenditures, as might be expected, education commands the most funds, and does, in fact, represent a relatively greater expenditure in the county than in the state.

CHAPTER III

OTHER SOCIO-ECONOMIC CHARACTERISTICS

In addition to employment and industry structure, there are several socio-economic influences which provide information relevant to economic review. It should be obvious that the economic development of an area is, in large part, dependent upon the characteristics of the population of that area. The availability of labor, educational level, age and skill composition, etc. all influence the decision of a firm to locate there. Thus, in order to fully evaluate economic potential, these factors must be considered.

POPULATION TRENDS

Population data is one of the most accurate and readily available sources of data for economic review. Population changes and migration patterns provide good indications of the economic condition of an area. Since people tend to follow available jobs, an increase in population tends to indicate that the economy is growing; this is especially true if that increase is due to in-migration.

Historic Population

Examination of the historic pattern of growth in the Gallatin County area shows a steady increase over the past four decades.

Table 3-1

POPULATION: 1930-1970

	1930	1940	1950	1960	1970
Gallatin County	16,124	18,269	21,902	26,045	32,505
Bozeman	6,855	8,655	11,325	13,361	18,670

Source: U.S. Bureau of the Census: General Population Characteristics, Montana, 1940-1970.

A closer examination of the recent population by census division indicates the pattern of growth throughout the county. (See Table 3-2.) Figures for the nation, the Rocky Mountain region, and the state are included for comparison.

Table 3-2

POPULATION TRENDS

BY CENSUS DIVISION

Census Division	Historic Population 1950	1960	1970	Percent Change 1950-60	1960-70
Gallatin County	21,902	26,045	32,505	18.9	24.8
Bozeman	11,325	13,361	18,670	17.9	39.7
Bozeman Rural	NA	4,067	4,027*		-1.0
Belgrade	NA	2,446	2,951		20.6
Gallatin Gateway	NA	1,019	1,469		44.0
Manhattan	NA	2,575	2,448		-5.0
Three Forks	NA	1,958	1,839		-6.1
West Yellowstone	NA	599	1,099		83.5
Montana	591,024	674,767	694,409	14.2	2.9
Region (000)	5,075	6,855	8,284	35.1	20.8
Nation (000)	151,326	179,323	203,185	18.5	13.3

*The notable reduction in population is primarily attributable to annexation of rural areas by the City of Bozeman.

Source: U.S. Bureau of the Census: General Population Characteristics.

The county has grown very rapidly, especially over the last decade. Much of the growth has been in the "urban" areas of Bozeman and Belgrade. The remainder has been in the southern end of the area (Gallatin Gateway and West Yellowstone Divisions.) These latter two divisions are of significant interest to this study because of their locations with respect to the Big Sky development. The Gallatin Gateway Division is just north of the north entrance to the Gallatin Canyon. The West Yellowstone Division encompasses the entire southern portion of the county, including the Canyon. It is

obvious that this whole area is developing. Much of this is probably attributable to the "shifting" of population from urban areas to more rural settings. In the West Yellowstone area the town of West Yellowstone has been growing substantially throughout the decade. It is interesting to note, however, that even with the increasing population in this portion of the county, the population in Gallatin Canyon itself was 50 families or approximately 150 people at the time of the 1970 census.

Forecasts have been made for the Bozeman City-County Planning Board by TAP, Inc., a local economic consulting firm. The firm has a good knowledge of the area and considerable expertise in forecasting. In addition, these are the figures upon which local planning work is based. For these reasons, the forecasts for the relevant areas are shown in Table 3-3 below.

Table 3-3

FORECAST - TOTAL POPULATION

UPPER, MOST LIKELY, AND LOWER LIMITS

Census Division	1970	1975	1980	1990
Gallatin County[6/]				
Upper Limit		38,591	48,472	68,574
Most Likely	32,505	36,753	44,758	59,786
Lower Limit		34,915	39,207	47,829
Bozeman				
Upper Limit		22,769	29,180	42,319
Most Likely	18,670	21,685	26,944	36,948
Lower Limit		20,601	23,603	29,558
Gallatin Gateway				
Upper Limit		1,813	2,326	3,018
Most Likely	1,469	1,727	2,148	2,631
Lower Limit		1,641	1,882	2,105
West Yellowstone				
Upper Limit		1,235	1,454	1,920
Most Likely	1,099	1,176	1,343	1,674
Lower Limit		1,117	1,176	1,339

Source: Gallatin County City-County Planning Board, Bozeman Area Place, 1972.

Components of Population Change

A change in population can be attributed to two factors: a natural change caused by a difference in the number of births vs. the number of deaths and/or a net in- or out-migration. Table 3-4 details these components for the last two decades.

Table 3-4

COMPONENTS OF POPULATION CHANGE

GALLATIN COUNTY, 1950-1970

	Population					Net Migration	
	1950	1960	Change	Births	Deaths	No.	Percent 7/
Gallatin County	21,902	26,045	4,143	5,887	1,966	222	1.0
State	591,024	674,767	83,743	171,000	62,000	-25,557	-4.3
Nation (000)	151,326	179,323	27,997	40,452	15,430	2,975*	2.0
	1960	1970					
Gallatin County	26,045	32,505	6,460	5,417	2,168	3,211	12.3
State	674,767	694,409	19,642	143,812	66,017	-58,153	-8.6
Nation (000)	179,323	203,185	23,862	37,701	17,517	3,678*	2.1

*Net civilian immigration.

Source: U.S. Bureau of the Census: Current Population Reports, 1960 and General Demographic Trends, Montana, 1970.

During the last decade, population increase was due almost equally to a positive birth/death ratio and a large net in-migration. The large in-migration is especially significant since it indicates that the area has experienced enough economic growth to support immigration to the area. When compared with the state-wide out-migration rate of 8.6%, the in-migration for Gallatin County becomes even more significant.

One important factor in the growth and stability of a community is its ability to provide opportunities for its young people. The young, particularly in the 18-34 age range, are in the process of forming households and beginning careers; they have fairly high expenditure levels and are generally able to

support themselves, assuming jobs are available. In Gallatin County, this group experiences a 60.8% gain in numbers during the decade, 1960-1970, a fact which would seem to contradict the often-heard statement: "We just don't have enough opportunity here to keep our talented young people." However, these figures are not sufficient proof in themselves. Analysis of net migration rates of the young is certainly more revealing (Table 3-5).

Table 3-5

NET MIGRATION OF YOUNG PEOPLE

GALLATIN COUNTY, 1960-1970

1960 Population, 8-24	8,643
Non-Resident, in College[8/]	2,700
Net Residents	5,943
Mortality[9/]	97
1970 Population, 18-34	11,914
Non-resident, in College[10/]	5,994
Net Residents	5,920
Natural Increase	5,846
Net Migration (Number)	84
Migration Rate (Percent)[11/]	1.4

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, Montana, 1960 and 1970 and General Population Characteristics, Montana, 1960 and 1970.

The figures included in this table are necessarily rough due to lack of data. (For information on assumptions, see footnotes.) However, they would seem to indicate that Gallatin County has a net migration rate for young people approximating 0. This does not necessarily indicate a lack of job opportunities, but may only signify a desire on the part of the young to "get out and see the world." The fact that the overall county in-migration rate is high also points towards this conclusion. In addition, the migration

rate of young people in Gallatin County becomes less problematic when compared to a state-wide out-migration rate of about 20%.

Population Dispersion

Montana is not a particularly populous state, but figures on population dispersion do give an indication of trends in the area. These figures are shown in Tables 3-6 and 3-7 below.

Table 3-6

POPULATION DENSITY, 1970

	Land Area Square Miles	Population Density
Gallatin County	2,517	12.9
State	148,587	4.8
Rocky Mountain Region (000)	863	9.6
Nation (000)	3,615	56.2

Source: U.S. Bureau of the Census: Number of Inhabitants, Montana, 1970.

Table 3-7

RURAL/URBAN DISTRIBUTION

1960-1970

	1970 Population			Percent Change 1960-1970		
		Rural			Rural	
	Urban	1000-2500	Other	Urban	1000-2500	Other
Gallatin County	18,670	2,495	11,340	39.7	12.5	8.4
State	370,676	53,685	270,048	9.5	-10.7	-2.2
Rocky Mountain Region (000)	6,055	363	1,863	31.6		
Nation (000)	149,281	6,600	47,225	19.2	2.5	-0.5

Source: U.S. Bureau of the Census: Number of Inhabitants, Montana, 1960 and 1970.

CHARACTERISTICS OF THE POPULATION

The ability of an area to sustain social and economic development is, to a large extent, determined by such characteristics as age distribution and educational attainment of the population.

Age and Sex Distribution

Age distribution of the population, by sex, is shown in Table 3-8. These figures are somewhat misleading as they show a very high proportion of persons in the 15-24 age group, which is due to the large number of college students residing in Bozeman. Without these students, the resident population would probably show a distribution more nearly approximating state and national figures.

Table 3-8
AGE DISTRIBUTION
BY SEX, 1970

	Distribution by Age Group						
	Under 5	5-14	15-24	25-44	45-64	65 & Over	Total 1970 Population
Males (Nos.):							
Bozeman	674	1,287	3,962	1,857	1,167	565	9,512
Gallatin County	1,245	2,849	5,185	3,542	2,662	1,135	16,618
State	29,120	76,687	61,041	77,161	71,201	31,795	247,005
Males (Pct.):							
Bozeman	7.1	13.5	41.6	19.5	12.3	5.9	100.0*
Gallatin County	7.5	17.1	31.2	21.3	16.0	6.8	100.0*
State	8.4	22.1	17.6	22.2	20.5	9.1	100.0*
Nation	8.8	21.0	17.7	23.8	20.2	8.5	100.0*
Females (Nos.):							
Bozeman	632	1,307	3,286	1,705	1,297	931	9,158
Gallatin County	1,170	2,778	4,426	3,363	2,667	1,483	15,887
State	27,934	74,189	60,827	77,716	69,797	36,941	347,404
Females (Pct.):							
Bozeman	6.9	14.3	35.9	18.6	14.2	10.2	100.0*
Gallatin County	7.4	17.5	27.9	21.2	16.8	9.3	100.0*
State	8.0	21.4	17.5	22.4	20.1	10.6	100.0*
Nation	8.1	19.2	17.1	23.6	20.9	11.2	100.0*

AGE DISTRIBUTION BY SEX, 1970, continued

	Under 5	5-14	15-24	25-44	45-64	65 & Over	Total 1970 Population
Total (Nos.):							
Bozeman	1,306	2,594	7,248	3,562	2,464	1,496	18,670
Gallatin County	2,415	5,627	9,611	6,905	5,329	2,618	32,505
State	57,054	150,876	121,868	154,877	140,998	68,736	694,409
Total (Pct.):							
Bozeman	7.0	13.9	38.9	19.1	13.2	8.0	100.0*
Gallatin County	7.4	18.2	29.6	21.2	16.4	8.1	100.0*
State	8.2	21.7	17.6	22.3	20.3	9.9	100.0*
Nation	8.4	20.0	17.5	23.6	20.6	9.9	100.0*

*May not add to 100.0 because of rounding.

Source: U.S. Bureau of the Census: General Population Characteristics, 1970.

Educational Attainment

The educational attainment of an area's population is an important determinant of that area's social and economic potential. Studies show that lifetime income of the educated is substantially higher than that of the uneducated. Thus, the educated represent a potential economic asset, providing they can find jobs consistent with their levels of skill. Table 3-9 shows educational attainment for the area vs. state and national figures. (See page 26.)

As shown in the table, Bozeman and Gallatin County have consistently exhibited levels of education higher than the averages for both the state and the nation. In fact, the median level of education in the area was the highest in the state in 1970. Certainly one factor contributing to this high level of training is the presence of Montana State University in the city. This presence not only provides educational opportunities for the residents, but also attracts a large number of highly educated persons to work at the

university. As long as the school continues to operate, which, in all probability, may as well be forever, one can expect the relative level of education in the area to remain high.

In the Gallatin Canyon area, educational attainment is also very high. Among those permanent residents responding to the Gallatin Canyon Study Team questionnaire, 85.6% have completed high school and 21.1% have completed college.

Table 3-9

EDUCATIONAL ATTAINMENT,

PERSONS 25 AND OVER

Area	Population		High School Graduates %		College Graduates %		Medium Years	
	1960	1970	1960	1970	1960	1970	1960	1970
Males:								
Bozeman	3,137	3,581	62.6	77.5	24.9	34.4	12.6	13.6
Gallatin County	6,464	7,331	55.6	69.0	18.8	24.4	12.3	12.7
State	181,881	180,092	42.9	55.6	9.0	12.7	10.7	12.2
Nation (000)	47,931	51,225	39.5	55.0	9.7	14.1	10.3	12.0
Females:								
Bozeman	3,274	3,927	67.6	76.9	15.4	21.9	12.6	12.9
Gallatin County	6,306	7,506	63.4	72.2	11.8	17.2	12.4	12.6
State	174,206	184,416	53.0	62.1	6.1	9.3	12.1	12.3
Nation (000)	51,508	56,976	42.5	55.5	55.8	8.2	10.9	12.0
Total:								
Bozeman	6,411	7,508	65.2	77.2	20.0	29.2	12.6	13.0
Gallatin County	12,770	14,837	59.5	70.6	15.3	20.8	12.3	12.6
State	356,087	364,508	47.8	59.2	7.5	11.1	11.6	12.3
Nation	99,438	108,201	41.1	55.3	7.7	11.0	10.6	12.0

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1960 and 1970.

CHARACTERISTICS OF THE LABOR FORCE

Number of Workers Available

If an industry is to locate in an area, it must be assured of obtaining the workers necessary to its production process. Accordingly, in assessing the potential of an area to absorb economic growth, one factor is the available labor force.

The term "labor force" is not meant to indicate actual employment; rather it is to be used as an indicator of potential employment, and as an estimate of the extent of economic participation by the population of the area. "Labor force," as used here, is defined as all persons who had jobs, even though they may have been absent or on layoff during the reference week, plus those persons who were looking for work during the previous four weeks and were available for employment during the reference week. This latter group constitutes the "unemployed".

The employment status in 1970, by sex, for residents of Bozeman and Gallatin County is detailed in Chapter II in the section on employment, Data for the Gallatin Canyon alone is not available. However, this is probably an insignificant omission, as the number of permanent residents in the Canyon at this time is relatively small and many of Big Sky's workers are drawn from Bozeman.

At the time of the 1970 Census, there were approximately 700 unemployed persons in the county. This certainly constitutes one source of available labor. However, probably the most important indicator for determining potential employment is not the actual number of persons in the force, but the labor force participation rate. This rate is defined as the percentage of the population, 16 years of age and over, that is actually in the labor force. (Table 3-10).

Table 3-10

LABOR FORCE PARTICIPATION

BY SEX, 1970

Category	Population 16 and over	Labor Force	Participation Rate - Percent	Change in Rate, 1960-1970
Males:				
Bozeman	7,442	4,361	58.6	-4.0
Gallatin County	12,288	8,198	66.7	-3.9
State	233,049	169,071	72.5	-4.4
Nation	67,409	51,195	75.9	-3.9
(000)				
Females:				
Bozeman	7,040	3,032	43.1	3.7
Gallatin County	11,577	4,679	40.4	5.2
State	237,723	91,578	38.5	5.5
Nation	72,774	31,520	43.3	5.6
(000)				
TOTAL:				
Bozeman	14,482	7,393	51.1	-0.4
Gallatin County	23,865	12,877	54.0	0.3
State	470,772	260,649	55.4	0.2
Nation	140,183	82,715	59.0	1.0

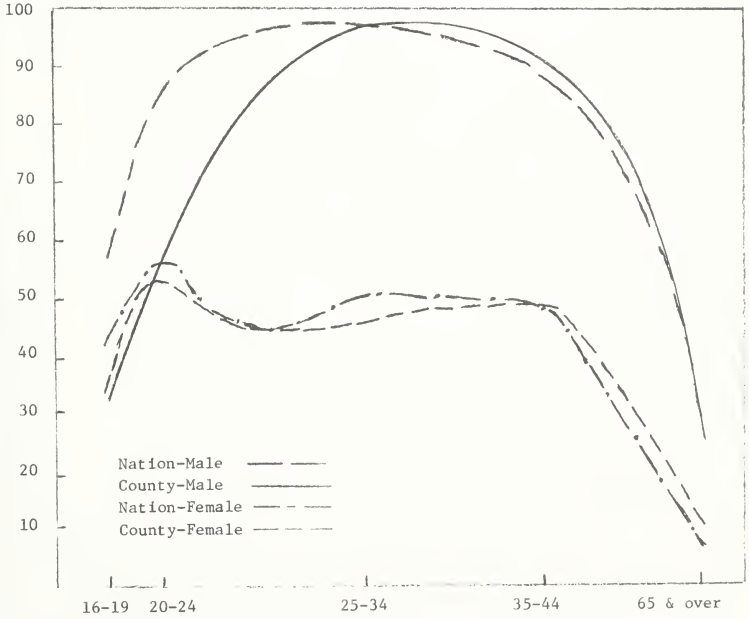
Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1960 and 1970.

The county labor force participation rate is 54.0%, which is a weighted average of a higher rate for males (66.7%) and a lower rate for females (40.5%). National rates are significantly higher: male-female labor force participation rates are 75.9% and 43.3%, respectively, and the average rate for both is 59.0%. The relatively low labor force

participation rates in the area would seem to indicate that there is a potentially larger work force available should economic opportunities arise. It should be noted, however, that this potential labor force is somewhat smaller than it may appear because of the large number of college students in residence in Bozeman. Graphs of labor force participation rates, by age, for Gallatin County and the nation show this factor more clearly (Figure 3-1).

Figure 1

LABOR FORCE PARTICIPATION RATE
BY AGE AND SEX, 1970



County rates for both men and women are significantly lower than national rates in the lower age groups, which is, in large part, due to the high proportion of students. In the 35-44 age group, the rate for men is about the same as the national rate, and for women, somewhat lower. At ages 45-64, labor force participation is slightly higher for men in Gallatin County and about the same for women. The proportion of persons 65 and over who are working is approximately equal in the county and the nation.

Labor Force Composition

Age and Sex Distribution

The 1970 labor force in Gallatin County was 12,877 persons, of which 8,198 or 63.7% were male. This percentage compares roughly with state and national figures, which were 64.9% and 61.9%, respectively.

Age composition, however, shows a different pattern (Table 3-11).

Table 3-11

AGE COMPOSITION OF LABOR FORCE
BY SEX, GALLATIN COUNTY, 1970

Age Group	Gallatin County Number[12/]	Gallatin County Percent	Nation Percent	Difference Gallatin County versus Nation
Males:				
16-19	719	8.7	8.1	0.6
20-24	1,555	18.9	13.6	5.3
25-34	1,763	21.4	22.0	-0.6
35-44	1,409	17.1	19.9	-2.8
45-64	2,446	29.7	32.4	-2.7
65 and over	343	4.2	4.0	0.2

AGE COMPOSITION OF LABOR FORCE

BY SEX, GALLATIN COUNTY, 1970 continued

Age Group	Gallatin County Number[12/]	Gallatin County Percent	Nation Percent	Difference Gallatin County versus Nation
Females:				
16-19	626	12.9	10.3	2.6
20-24	1,209	25.0	15.5	9.5
25-34	840	17.4	18.1	-0.7
25-44	690	14.2	18.9	-4.7
45-64	1,293	26.7	33.9	-7.2
65 and over	187	3.9	3.4	0.5

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1970; General Population Characteristics, 1970; and Statistical Abstract of the United States, 1972.

The labor force in Gallatin County is considerably younger, on the whole, than that of the nation. If these young people continue to reside in the county, this should be a source of considerable economic strength. The notably larger proportion of young females working is, however, probably to support the family while their husbands attend school.

Skill Composition

One of the factors influencing the type and magnitude of economic development in an area is the skill composition of the work force. Enumerated below in Table 3-12 is the occupation of the employed and the last occupation of the experienced unemployed for all persons, 16 and over. Data on experienced unemployed provides especially pertinent information as these persons represent a trained and readily-available source of labor. Figures are presented for Gallation County, as it is assumed that

the mobility of the labor force within the county is sufficient to allow workers who so wish to readily locate a job within the county.

Table 3-12

SKILL COMPOSITION OF THE WORK FORCE
GALLATIN COUNTY, 1970

	Occupation of Employed		Last Occupation of Unemployed		Percent Unemployed	
	Male	Female	Male	Female	Male	Female
Professional, Technical, & Managerial Workers	3225	1194	63	56	1.9	4.5
Sales Workers	435	329	5	15	1.1	4.4
Clercial and Kindred Workers	414	1372	4	92	1.0	6.3
Craftsmen, Foremen, & Kindred Workers	1236	37	95		7.1	
Operatives, including Transport	836	194	73		8.0	
Laborers, except farm	421	44	106	6	20.1	12.0
Farm Workers	412	37	21	12	4.8	24.5
Service Workers except Private Household	765	982	31	84	3.9	7.9
Private Household		196		8		3.9
TOTAL	7744	4385	410*	273	5.0	5.9

*Total includes persons who worked more than 10 years ago, not shown in occupation break-down.

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, Montana, 1970.

In the Gallatin Canyon itself, occupational composition of the labor force leans heavily toward professional, technical, and managerial workers. However, this labor force is not of particular interest at the present as all workers in the Canyon are currently employed.

FINANCIAL CHARACTERISTICS OF THE POPULATION

Income

Personal and family incomes are a good measure of the purchasing power

of the area's residents. Because of this, income statistics are key indicators of living standards in the area.

Total Personal Income

Total personal income is probably the best single indicator of overall economic activity in an area. This figure includes current income from all sources. Wage and salary payments constitute approximately 70%; the remainder comes from such sources as property income, transfer payments, private pensions, and business and professional profits. Table 3-13 shows total personal income in terms of actual and constant dollars for the period, 1959-1969.

Table 3-13

TOTAL PERSONAL INCOME
GALLATIN COUNTY, 1959-1969

	Actual Dollars ($1,000,000)		Percent Change	Constant Dollars (1967 $1,000,000)		Percent Change
	1959	1969	1959-1969	1959	1969	1959-1969
Gallatin County	47.9	83.7	85.2	55.3	80.8	46.1
State	1,345	2,172	61.5	1,553	1,979	27.4
Nation	401,000	744,479	85.7	463,155	678,217	46.4

Source: U.S. Bureau of the Census: General Social and Economic Characteristics. 1960 and 1970; U.S. Department of Commerce, Office of Business Economics, Survey of Current Business.

Total personal income in Gallatin County has increased at approximately the same rate as that for the United States, and at a substantially greater rate than for Montana (46.1% in terms of constant dollars vs. 27.4%). This tends to indicate that growth in the overall economic activity of the county is roughly keeping pace with that of the nation.

Per Capita Personal Income

Increases or decreases in total personal income tend to occur, in part, due to increases or decreases in population. To eliminate this bias, economists often use per capita income, which is total personal income divided by population. Per capita personal income in actual and constant dollars is detailed in Table 3-14.

Table 3-14
PER CAPITA PERSONAL INCOME
GALLATIN COUNTY, 1959-1969

	Actual Dollars ($1,000,000)		Percent Change	Constant Dollars (1967 $1,000,000)		Percent Change
	1959	1969	1959-69	1959	1969	1959-69
Gallatin County	1,856	2,730	47.1	2,144	2,487	16.0
State	2,010	2,712	34.9	2,322	2,471	6.4
Nation	2,219	3,699	66.7	2,563	3,370	31.5

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, Montana, 1960 and 1970.

Per capita income is low in Gallatin County, being only slightly greater than that for the state in 1969. However, this is largely due to the large student population. The rapid growth in this population probably also accounts for the slow growth in per capita personal income (16.0% in constant dollars, which was about one-half the national growth rate).

Family Income

Family income statistics are yet another source of information on economic activity and provide perhaps one of the best indicators of economic well-being of the population. The standard measure usually associated with family income is the median income, or middle value of all values

placed in rank order (Table 3-15). The change in median family income is only slightly less than that for the nation, which would indicate that county families are probably maintaining their standard of living relative to the national standard.

Table 3-15

MEDIAN FAMILY INCOME

1959 & 1969

	1970 Total Families	Median Family Income 1959	1969	% Change 1959-69
Bozeman	3,845	$5,887	$8,776	49.1
Gallatin County	7,383	5,360	8,833	64.8
State	171,812	5,403	8,512	57.5
Nation	51,948*	5,660	9,433	66.7

*Figure in thousands (000).

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1960 and 1970.

Another important measure in family income data is family income distribution, for this is one factor which determines the level of economic activity for the area. The level of economic activity is partially tied to the marginal propensity to consume among members of the population. (Marginal propensity to consume provides an indication of the proportion of the next dollar earned which will be spent on immediate needs rather than saved). Low-income families typically exhibit a much higher marginal propensity to consume than high-income families. Thus, if two areas have the same total personal income, but one area has a higher proportion of this income distributed among low-income families, this area will have a higher level of total spending and thus, a higher level of economic activity.

Table 3-16 shows family income distribution for 1969.

Table 3-16

FAMILY INCOME DISTRIBUTION, 1969

	Percentage Distribution of Family Income				
	$ 0-2,999	$3,000-4,999	$5,000-6,999	$7,000-7,999	$10,000 & Over
Bozeman	8.1	11.2	16.6	22.3	41.7
Gallatin County	8.2	10.9	16.8	23.0	41.1
State	10.5	11.5	15.1	24.4	38.5
Nation	913	10.7	12.3	21.7	45.9

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1970.

35.9% of all families in the county have incomes of less than $7,000, which compares favorably with the national figure of 32.3% in this range. At the other extreme, 16.7% of all county families have incomes of $15,000 or more, as compared with 19.2% nationally. Families with very high incomes tend to depress the level of economic activity in an area due to the fact that they tend to save, rather than circulate, many of their dollars. An over-abundance of high-income families is not a problem in this area, as discussed above. However, poverty may be. Tables 3-17 and 3-18 (next page) examine the situation with regard to poverty and public assistance for families and unrelated individuals.

The Gallatin County area has a smaller proportion of both low-income families and low-income individuals than both the state and the nation. In addition, only a very small proportion are receiving public assistance.

Table 3-17

POVERTY STATUS & PUBLIC ASSISTANCE
FOR FAMILIES, 1969

	Low-Income Families					
					Pub. Ass.	
	Number	% of All Families	Mean Income	Mean Deficit	No.	% of All Families
Bozeman	243	6.3	1,901	1,084	16	0.4
Gallatin County	516	7.0	1,906	1,175	30	0.4
State	17,821	10.4	-----	-----	6,620	3.9
Nation (000)	4,950	9.7	-----	-----	-----	---

Table 3-18

POVERTY STATUS & PUBLIC ASSISTANCE
FOR UNRELATED INDIVIDUALS, 1969

			Low-Income Individuals					
							Pub. Ass.	
	Number	% of Pop.	Number	% of U.I.	Mean Income	Mean Deficit	No.	%
Bozeman	5,663	30.3	1,176	20.8	983	907	27	0.5
Gallatin County	6,532	20.1	1,546	23.7	985	888	46	0.7
State	67,836	9.8	23,675	34.9	---	---	3,451	5.1
Nation (000)	14,827	7.3	4,851	32.7	---	---	-----	---

Source: U.S. Bureau of the Census: General Social and Economic Characteristics, 1970.

Effective Buying Power

Estimates have been made for effective buying income in the area. Buying income per household in Bozeman was estimated at $9,989 in 1970, which exceeds that for the state by over $500. Other estimates for the county and state, 1967-1970, are shown in Table 3-19.

Table 3-19

EFFECTIVE BUYING INCOME
GALLATIN COUNTY, 1969-70

	1967	1968	1969	1970
Gallatin County	$8,112	$8,091	$9,025	$9,224
State	7,867	8,130	8,500	9,436

Source: "Sales Management's Survey of Buying Power," The Market Magazine; 1967, 1968, 1969 and 1970.

CHAPTER IV

AREA INFRASTRUCTURE

The infrastructure represents the support facilities for the economic community. If people are to locate in an area, they must be assured of certain basic necessities such as water, electricity, transportation, schooling for their children, and health care. It is expected that the major impact of Big Sky on this type of facility will be in Gallatin Canyon. There may be a secondary impact on Bozeman, especially in the areas of health care and schooling. In addition, any growth of the city due to its proximity to Big Sky will place an additional burden on city facilities. With this in mind, this section will deal most specifically with the Canyon. A brief analysis of facilities in Bozeman will be included, but very little will be said concerning services in the rest of Gallatin County.

WATER SUPPLY AND CONSUMPTION

Residents of Bozeman obtain their water from the city reservoir, located in the Hyalite Canyon area. This reservoir has a peak capacity of 17 million gallons per day. In 1970, peak usage was just under 11 million gallons per day, and in 1971 it was 13 million gallons per day. With the rapid increase in population and the resultant increase in water usage which Bozeman has been experiencing, city fathers anticipate that it will be necessary to add to the water system capacity within the next few years.[12/]

Most other Gallatin County residents are dependent on natural springs or drilled wells for their water. The Montana State Department of Health regulates these facilities in subdivisions, based on lot size, land contour,

ground water level, location of sanitary disposal facilities, etc. However, individual family water supplies are not subject to approval prior to installation, nor to inspection or testing during operation. The individual family is free to use whatever water is on hand.

The majority of Gallatin Canyon residents fall into this latter category and generally obtain their water supplies from wells without further treatment. This pattern is likely to continue for those homes located outside of the Big Sky development. Big Sky itself will have its own water system. Water for the Meadow Village will be pumped from a well into a 250,000-gallon storage tank. Individual homes will be supplied by a gravity flow system from the tank. The system of water supply for the Mountain Village has not yet been determined. However, it will probably be similar to that for the Meadow Village.[13/]

At the present time, this appears to be adequate. However, there is an evident lack of good background information on the use and supply of ground water in the area, which makes prediction of future adequacy impossible. Much of the necessary data is currently being collected by the Gallatin Canyon Study Team at Montana State University, but monitoring is not yet completed.

In terms of water quality, the Study Team has found the ground water in the Canyon to be of uniformly high quality. However, it is not known what changes may result from a rapidly increased residential and commerical development.

Although data is not complete, it appears as if the quantity of water is sufficient for development. Should a problem arise, Montana has a fairly

well-developed system of water rights which will prevail. Under these rights, every citizen has the right to divert and use water for a beneficial use so long as he does not infringe upon the rights of others acquired by prior appropriation. "Beneficial uses" of water in Montana are for agriculture, mining, and logging. Under present Montana Law, fish do not have a right for beneficial use of water, nor does recreation.

Water use in the Gallatin Canyon may also be affected by the Reservation Doctrine. Most of the water in the West Gallatin drainage originates on Forest Service or other federally controlled lands. Therefore, according to a recent U.S. Supreme Court decision, the Forest Service has a prior right over those rights which have been made since February, 1897. The Reservation Doctrine can influence the development of all recreation or other areas. If the development is on private land and the water originates on Forest Service or other federally controlled lands, the rules and regulations of the federal agencies can and will dictate the terms of development.[14/]

ELECTRICAL POWER CAPACITY AND CONSUMPTION

The majority of electrical power in Gallatin County is supplied by the Montana Power Company. Unlike many Eastern localities, the area has not been faced with power shortages. The Bozeman area is supplied by a 30,000 kilowatt substation. Peak usage is estimated to be around 25,000 kilowatts.

In the past, the entire Gallatin Canyon has been served by the Hot Springs substation in Norris, Montana, which has a capacity of 2,500 kilowatts. Peak usage here has been about 2,000 kilowatts. However, with the advent of Big Sky, power demands will increase greatly and this facility will no longer be adequate. To meet this expected increase in demand, Montana Power is currently constructing a 50,000 volt line in the Canyon.

The substation, which will be located at the Meadow Village of Big Sky, will supply power to Canyon residents from Karst Ranch 10 miles north of Big Sky southward, including all residents of Big Sky. The line should be operable by September, 1972.[15/]

SANITATION FACILITIES

Sewage disposal in Bozeman is provided by a city sewer system and sewage treatment plant. At the present time, Bozeman is one of the few communities in Montana with secondary treatment. However, the secondary treatment phase of the facility has not been completed due to funding problems. City fathers are hopeful that this situation will be corrected within the next few years. Upon completing, this plant will be adequate to serve a population of approximately 30,000[16/]

In rural areas, individual homes and businesses, except for large enterprises, discharge sewage into the ground (septic tanks and drain fields) without extensive treatment, including chlorination. All new sewage disposal units, domestic and commercial, must be installed under the supervision of the County Health Department. An installation permit is required, which results in the submission and approval of plans to conform with specifications based on the requirements of local conditions. In the case of larger-sized installations, people on the Montana State Board of Health also participate in the review and approval process.

While regulations governing sewage disposal are probably adequate for the present, the degree of conformance among older residences and other installations is not known. At summer home sites leased from the Forest Service, newer installations have been constructed in conformance with

Gallatin County Health Regulations because Forest Service permits and final approval are dependent upon such conformance. However, disposal systems at older homes and cabins are often not designed or operated satisfactorily.

The Big Sky development will have a highly sophisticated sewage treatment system with tertiary treatment. A statement prepared for Big Sky by Morrison-Maierle, Inc., the engineering firm which designed and engineered this facility, states:

> The Sanitary Sewer Collection System will collect sanitary wastes from both the Mountain and Meadow Villages and transport them to a single treatment facility located to the east of the 'Meadow Village'.
>
> The Treatment facility will consist of a series of three ponds and a filtration plant which will provide tertiary quality effluent. The first pond containing 8 million gallons, will include mechanical aeration equipment to provide proper oxygenation of the wastewater for good biological treatment. The second pond with a capacity of approximately 50 million gallons will serve as a holding pond to store winter wastewater flows following biological treatment in the Aeration Pond. From the storage pond the water will be sand filtered and chlorinated before discharge to the final pond. The water in the final pond will be of tertiary quality except for nutrient removal. Water will be pumped from the final pond for sprinkler irrigation of the golf course during the growing season. The golf course irrigation requirement will normally exceed the wastewater flows thus requiring supplementation from the West Fork. With proper dispersal of chlorine, the final pond will be used to grow fish.

In view of the intensive treatment planned by Big Sky, it is difficult to foresee any problems from domestic sewage at the development. However, sewage disposal during the construction phase may cause some pollution problems. The possibility that many of the installations may be of a temporary nature during the construction period would lead to the prediction that their adequacy and quality will be minimal.

As for the remainder of the Canyon, mushrooming residential and commercial

developments adjoining the resort area will result in substantially increased sewage disposal from privately controlled installations. Although there appear to be reasonably adequate regulations covering sewage treatment, there are problems with regard to their implementation by the County Health Department. In carrying out the responsibilities in regard to approval of sites, plans and construction, commonly there is not enough information available on which to arrive at a clearly satisfactory decision and "best judgement" simply may not be adequate. Researchers affiliated with the Gallatin Canyon Study Team are currently studying the problem and, hopefully, will be able to offer some assistance in this area.

As in other areas of the country, solid waste disposal is a problem in Gallatin County. The county operates three sanitary landfills: one at Blueberry Hill on the outskirts of Bozeman, one in West Yellowstone, and on in Logan (serving the Manhattan, Belgrade, and Three Forks areas). At the present time, these facilities are fairly adequate for the areas they serve.

Garbage is collected in Bozeman by Suhr Hauling, a private company under contract to the city, and is dumped at the sanitary landfill on Blueberry Hill. With 200 acres, this landfill should be adequate for many years.[17/]

The situation in Gallatin Canyon is not nearly so favorable. As of July 1, 1970, the Forest Service permanently closed the existing dump near Rainbow Ranch in the Canyon. Since that time, Canyon residents have been without convenient refuse disposal facilities. Some of these residents haul their garbage to the dump in Bozeman or West Yellowstone; others have contracted with Suhr to have it removed. Undoubtedly, some residents dispose

of refuse illegally in public litter barrels provided by the Forest Service at their campgrounds. All of these, though inconvenient, are environmentally acceptable methods of refuse disposal. The alarming factor is the seemingly large proportion of people who dispose of their garbage in pits which they have dug for the purpose, or worse yet, in open dumps or gulleys.

Big Sky has contracted with Suhr to haul refuse to the Blueberry Hill facility. However, the distance involved is great (approximately 50 miles) and this may no longer be feasible as the population at Big Sky increases.

At the present time, the situation is certainly unfavorable, if not dangerous. The practice of dumping by individual property owners could lead to serious contamination of the ground water. With a large influx of population, this situation could become worse. The Gallatin County Sanitarian has stated that there is a definite need for a county-run landfill in the Canyon. However, with the increase in land value due to the increased activity in the area, it has not been possible to find the necessary land.[18/] There is a possibility that a dump might be located on Forest Service land, but it should be noted that when the Forest Service closed the existing dump in 1970, the Gallatin Canyon Real Property Owners Association requested formation of a disposal district and approval of a site located on Forest Service land along the Rainbow logging road. About the same time, the Gallatin County Commissioners held hearings regarding the feasibility of establishing a garbage disposal district co-terminus with the boundaries of the Canyon. This effort failed upon petition of 2/3 of the residents opposing the proposed district. As a result, there is no new dump.[19/]

What will actually happen with regard to the solid waste disposal problem in unknown at present. The Murray-McCormick Environmental Group of

Sacramento, California, the planning firm hired to prepare a comprehensive plan for the Gallatin Canyon, has stated in its Interim Report: "It is the recommendation of this plan that no further disposal fields or landfill sites be located in the Canyon. ... Until such time as a proper and suitable means is found to take care of solid waste disposal, it is recommended that all solid wastes be 'exported' to existing sites outside the Canyon."

It is possible, however, that Big Sky will find it infeasible to continue with the present arrangement as the area develops. Should this occur, they do have plans for their own sanitary landfill. Possibly, the facility would be deeded to the County for maintenance, in which case it would be open to Canyon residents. The environmental effects, especially on ground and surface waters, are not known at this time.

In conclusion, the sanitation facilities are marginal at present. Unless more and better data on waste disposal are gathered and used to build better facilities and enact more effective regulations, it is possible that with a large influx of population, sanitation could become a serious problem in the future.

TRANSPORTATION

Bozeman and surrounding areas, including Gallatin Canyon are easily accessible by several private and commercial modes of transportation, including railroad, air, bus, and automobile.

Rail Passenger

At the present time, Amtrak is servicing southern Montana with a train traveling across the lower half of the state and connecting at Spokane, Washington, and Fargo, North Dakota, with the main Amtrak line. The route

is served by three trains in each direction per week. According to the best available information, this service is still on a trial basis pending an evaluation of use rates.

In addition, daily rail passenger service is indirectly provided over the main Amtrak route in northern Montana. The Greyhound Bus Lines offer daily transportation for those wishing to connect to the line in Havre.[20/]

Air Service

Commercial air service is available at Gallatin Field, located approximately eight miles north of Bozeman on U.S. Highway 10. Both Frontier and Northwest Airlines serve the area with several flights daily.

Northwest service indcludes three flights daily each way, east and west. Service is to such major cities as Seattle, Portland, Minneapolis, Chicago, Detroit, and Washington, D.C., which allows passengers to readily connect with flights to all major cities. The schedule includes a flight from Chicago to Bozeman in the evening and Bozeman to Chicago the next morning. This provides a convenient mode of transportation for Mid-westerners who wish to week-end in the Gallatin Valley. At the present time, the service is on a temporary basis for the summer. However, local agents believe that the demand will be sufficient to warrant maintaining the route on a permanent basis. In addition to the above service, Northwest makes in-state stops in Butte, Helena, Missoula, and Billings.

Frontier serves passengers in a north-south direction with two flights daily each way. The airline flies mainly to Denver and Salt Lake City with excellent connections to the Dallas-Fort Worth area and other points in the

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South and West. Besides Bozeman, the only other in-state stops are in Missoula and Billings.

Bus Service

Bus service is provided by Greyhound Lines West and three local carriers: Belt Mountain Transportation, Clark Fork Valley Express Co., and Yellowstone Park Lines. Bus service via Greyhound includes primarily east-west service with four daily frequencies each way and connections to points north and south. Major stops on each route are:

Westbound	Eastbound
Bozeman	Bozeman
Butte	Billings
Missoula	Miles City
Spokane	Bismarck, N.D.
Wenatchee	Fargo, N.D.
Seattle	Minneapolis
	Chicago

Northbound service connects at Butte to Great Falls and Havre three times daily. Two daily frequencies are provided from Billings to Cheyenne, Wyoming, and Denver.

Belt Mountain Transportation provides daily service to Great Falls with connections in Livingston to Gardiner. Daily service to and from Helena with connections to Missoula and Kalispell is provided by the Clark Fork Valley Express.

Citizens between Bozeman and West Yellowstone are served by Yellowstone Park Lines. The bus makes one trip daily in the summer each way with several stops in Gallatin Canyon, including one at Big Sky. This line provides an additional service in that it will pick up passengers arriving at Gallatin Field in the morning and transport them down the Canyon in the

afternoon. In the past, winter service has been limited to three frequencies per week.[21/]

Highway System

Gallatin County is served by two major U.S. highways. Interstate 90-94 runs east and west through Bozeman, providing four-lane driving access to major eastern and western cities. For those wishing to travel in a north-south direction, Interstate 90 intersects Interstate 15 at Butte. Major north-south travel within the county is over U.S. Highway 191, a paved two-lane highway which runs from Bozeman down the Gallatin Canyon to West Yellowstone and points south. It is this highway which passes directly by the Big Sky Recreation Complex. Access to U.S. 191 from the Madison County area is via U.S. Highway 287, which connects seven miles west of Bozeman at Four Corners and eight miles north of West Yellowstone.

Other travel in the county is primarily over dual-lane paved highways and gravel roads.

Rail and Motor Freight

Rail freight service in Gallatin County is provided in Bozeman by the Burlington Northern and Chicago, Milwaukee, St. Paul and Pacific Railroads. Motor freight carriers include Garrett Freightlines, Inc., and Northern Pacific Transport Co., and a local carrier: Butte-Bozeman Delivery Service.

EDUCATIONAL FACILITIES AVAILABLE

In analyzing educational facilities with respect to their capacity to absorb the potential impact of the influx of people due to Big Sky, the county-wide picture probably has very little significance. If population distribution and school-use patterns continue as in the past, the school

systems directly affected will be in Bozeman and Gallatin Canyon. It is possible that the school in Gallatin Gateway may also experience some pressure.

Bozeman's educational facilities include a public kindergarten, six grade schools, one junior high school, a public high school, and two parochial high schools, as well as a vocational-technical school and Montana State University. The public school system is presently operating slightly below capacity with space for an additional 150 students. (See Table 4-1.)

Table 4-1

BOZEMAN PUBLIC SCHOOLS

CAPACITY AND ATTENDANCE[1]

School	Number of Teachers[2]	Number of Classrooms	Capacity	Attendance
Emerson (K-4)	18	22	525	445
Hawthorne (K-4)	10	10	275	279
Irving (K-4)	11	11	300	305
Longfellow (K-4)	14	14	370	358
Whittier (K-4)	12	12	350	337
Willson (K-4)	32	28	750	674
Junior High (7-9)	57	50	930	977
Senior High (10-12)	52	36	1100	1075
Vo-Tech	6	6	200	200

[1]As of October 1, 1971.

[2]Includes counselors and librarians.

Source: Secretary to the City Superintendent of Schools, June, 1972.

Beyond the high school level, both technical training and university education are available in Bozeman. Bozeman Vo-Tech currently offers nine training programs to prepare students for the following occupations: licensed practical nurse; physical therapist; medical laboratory assistant; general secretary; receptionist, clerk and key punch operator; medical

secretary; legal secretary; merchandising manager; and junior accountant. Facilities at the Vo-Tech school include six classrooms with two full-time and four part-time teachers. In addition, hospital facilities are used in training LPNs, physical therapists and laboratory assistants. At the present time, the school is operating at capacity with an attendance of 200 students. There is not now, nor will there be, any job training available in the growth center itself.

Univeristy education is available at Montana State University, a fully accredited institution of higher learning with a student body of more than 8,000 and a teaching faculty of over 500, with another 200 professional staff members engaged in research or extension activities. Course work may be pursued toward the bachelor's degree in 45 curricula, the master's degree in 33 and the doctorate in 20. In addition to regular course work, instruction is available to those not regularly enrolled at Montana State University through the Office of Continuing Education which administers and coordinates courses, institutes and conferences.[22/]

Schooling is provided in the Canyon for grades 1-6 at the Ophir School, located approximately three miles south of Big Sky. At the present time, the school has two classrooms and two teachers for the twenty-five students in attendance. This is far below the capacity of the existing building, which is listed as 50. In addition, the structure was designed to permit future expansion should this become necessary. While the extra-curricular offerings for students at the school are extremely limited, the standard curriculum found in most of the state's elementary schools is being provided. Year-round Canyon residents with children attending Ophir School rate it as "average" to "above-average".

Children at the north end of the Canyon attend school in Gallatin Gateway, which also has facilities for grades 1-8. At the present time, this school has a capacity of 150 and an attendance of 100 in a 6-room school. It is possible that the school in Gallatin Gateway could take on some additional students who would normally attend the Ophir School, should the need arise.

All schooling beyond grade 8 is available for Canyon residents only in Bozeman. Students at this level either ride the bus from Beckman Flats or board in the city. As far as educational services for students in the Canyon are concerned, residents do not seem to favor additional school development in the Canyon.[23/]

RECREATION FACILITIES AVAILABLE

The entire Gallatin Valley is an area of uncommon beauty and abundant outdoor recreation opportunity. Approximately 27 percent of the land area in the county is owned by the U.S. Forest Service and is accessible to the public for all types of outdoor recreation associated with the forest and mountain setting. Yellowstone Park, perhaps one of Nature's most unusual showcases, is situated to the south about 90 miles from Bozeman. In addition, the Spanish Peaks Primitive Area is located in the Gallatin Canyon area. Three major rivers, the Gallatin, Madison, Jefferson, flow together in the county to form the Missouri.

These "natural" facilities are spread throughout the county, but residents of the Gallatin Canyon have perhaps the largest selection in close proximity. Many residents of the Canyon have indicated that this is one of the primary reasons they have chosen to live there. Major recreation uses

of the Canyon by residents include camping, hunting, fishing, snowmobiling, hiking, horseback riding, and sightseeing.

There are no lakes of substantial size in the Bozeman area. However, for those who enjoy boating, waterskiing and other types of water-based recreation, there are two suitable areas: the Hebgen-Quake Lake area, approximately 90 miles to the south, and Canyon Ferry Lake, approximately 70 miles north.

Organized recreation and sporting events are primarily centered in Bozeman, where there are numerous facilities for both participant and spectator sports. The city has two nine-hole golf courses; a number of tennis courts; a municipal swimming pool; and a number of playing fields for soccer, football, baseball, etc. In addition, Montana State University has many excellent facilities which are open to the public at specified times each week. These include a bowling alley, handball courts, basketball courts, indoor swimming pool, etc. A new Health and Physical Education Complex is currently under construction. Upon completion, the Complex will enhance the already substantial facilities at Montana State.

An outdoor sports complex is also planned for the area. The complex is being financed through money raised by the Bozeman Softball Association, private contributions, and matching funds from the Bureau of Outdoor Recreation. Plans for the area at the present envision four softball fields and a number of tennis courts. Other facilities may be added in the future.

For those who wish to participate in organized sports, there are a number of competitions in both city and university leagues. These include such sports as softball, basketball, volleyball, bowling, tennis, etc.

Spectators also find a wide selection of sports from rodeo, soccer, and tennis to football, basketball, and baseball.

Good skiing facilities are available at Bridger Bowl, located about 25 miles northeast of Bozeman. Bear Canyon, another smaller ski area, is located approximately 15 miles southeast of the city.

Movies, plays, concerts, lectures, and other cultural events are also available in Bozeman. The city has one outdoor and four indoor movie theaters. Members of the community have formed the Community Concert Association, which presents a yearly concert series of classical works. Although the series is well-supported, tickets for the concerts are usually available throughout the season. In addition, the Bozeman Symphony Orchestra presents a number of concerts each year.

Most other events are through the auspices of Montana State University. The university community sponsors a wide range of cultural affairs, including lectures, concerts, and plays. In addition, there are a number of recitals given by faculty and students of music and dance. Special annual programs include The Loft Theater, Bozeman's summer theater, which is primarily produced through the university drama department. The university also sponsors an annual chamber music workshop for outstanding musicians from the western states. At the conclusion of the workshop, each group gives a concert which is open to the public.

For those who enjoy painting, sculpture, and other fine arts, both the university and the community have facilities for instruction and exhibition. The Ketterer Art Gallery in downtown Bozeman offers instruction in all types of arts and crafts. In addition, there are regular showings of works by local artists. The university offers a fully-accredited program leading to

both Bachelor and Master of Art degrees. In conjunction with the program, they sponsor a number of faculty and student art shows.

All of these facilities are available to residents of the Canyon. The travel distances are not great by Montana standards (probably in the range of 30-60 miles to Bozeman) and since many of these residents do work in the city, we may assume they are not prohibitive.

Big Sky will, however, provide additional recreation opportunities which are more easily accessible. Plans for the area include tennis courts, a golf course, swimming pool, volleyball courts, skating rink, and ski area, all of which will be open to the public for a fee. In addition, the corporation plans to build a movie theater and possibly a playhouse.

LAND FOR COMMERCIAL DEVELOPMENT

Development on land owned by Big Sky will be restricted to service establishments which compliment the recreation orientation of the Big Sky Development itself. No industry will be permitted. However, many different types of commercial establishments such as grocery stores, drug stores, a gas station, restaurants, bars, sporting equipment stores, boutiques, and beauty shops are expected to be operating.

Big Sky expects approximately 25 different businesses. Facilities for these will be built as shells and rented from Big Sky. Should more businesses eventually wish to locate in the area, land will be made available.

TIME-DISTANCE RELATIONSHIPS

Big Sky, Inc. is located on the West Fork of the West Gallatin River in Gallatin Canyon, Gallatin County, Montana. This Canyon is in the southern

portion of the county and is served by U.S. Highway 191, which runs north and south, the length of the Canyon.

The development itself is in approximately the center of the Canyon, about halfway between Bozeman and West Yellowstone. Access to the area is only available through these two cities and requires about one hour of driving time from either.

CHAPTER V

THE ENVIRONMENT

At the present time, the Gallatin Canyon is a semi-primitive area of uncommon natural beauty. The area is heavily forested and game can often be seen on the hillsides adjacent to Highway 191. There has been very little development in the Canyon, confined mostly to a few homes and about ten business establishments, including cafes and dude ranching outfits. Most development has been along the highway corridor.

Traffic through the Canyon is comprised primarily of local people, truckers, and tourists on their way through. According to Montana Highway Commission statistics, average daily traffic in 1970 was 775 and in 1971, 915. Traffic is substantially higher during the summer months and lower in the winter. However, the roadway could hardly be considered congested.

Environmental quality is generally high. Air quality is considered high. Occasionally, the air is hazy due to forest fires or slash burning, but otherwise, air quality is not now a problem. Noise pollution is not a problem either.

Montana's climate has a nation-wide reputation. News reports would have one believe that Montanans inhabit the nation's deep-freeze. Certainly, winter temperatures do reach some spectacular lows, but statistics indicate that the Gallatin County area is little, if any, more uncomfortable than much of the heavily-populated Northeast. The dry climate makes both winter cold and summer heat more bearable. In addition, the area receives more than its share of both summer and winter sunshine.

The water supply is of uniformly high quality, as discussed in Chapter IV.

There is some problem with sedimentation in the rivers, especially during spring run-off. The West Gallatin River also experiences sedimentary clouding during periods of heavy rain. This is primarily due to erosion up the Porcupine Creek drainage. Logging roads in the vicinity of the West Fork have contributed to a high silt content in this river. Prior to construction of Big Sky, U.S. Forest Service studies showed a mean turbidity of 21 mg./l during months of spring run-off with a maximum encountered in May of 117 mg./l. Minimum flows during stable conditions had turbidities of 11 mg./l.

Waste disposal is, and will continue to be, a problem. For further discussion, refer to Chapter IV.

In general, the Gallatin Canyon, and most of the remainder of the county, exhibits exceptionally high environmental quality. The notable exception is at Trident, where the cement plant produces a relatively large amount of air pollution. The area is well-served by roads at the present time, and the only real traffic problems seem to be in the city of Bozeman, where 5 o'clock traffic can often cause some traffic snarls. The Canyon is especially scenic and is well-suited to outdoor recreation, which is the present use.

CHAPTER VI

EVALUATION WITH RESPECT TO OBJECTIVES

ABILITY OF THE AREA TO ATTRACT AND MAINTAIN INDUSTRY

Gallatin County has exhibited substantial growth in both population and employment, factors which would tend to indicate a growing economy. This favorable economic climate is primarily attributable to substantial growth in Federal and State government employment (including Montana State University, which has nearly doubled in size during the last decade) and growth in tourism. Light industrial activity is also increasing. Growth in these primary areas has also lead to a large increase in the size of the derivative sector.

Over the past one or two years, the derivative sector in Bozeman has mushroomed, with new shopping centers, including two new supermarkets and a new drugstore; new restaurants; and a new motor inn and a large number of expansion units on existing inns either in existence or in planning stages. It is difficult to assess the effect of Big Sky in attracting these new developments. But since the recreation complex is located approximately 50 miles from the city, it is assumed that this was only a partial factor, with builders also being influenced by the economic situation in Bozeman itself.

With regard to the West Fork area, there is no past history of economic growth. However, because of the financial position of the firms backing Big Sky, Inc., and the large amount of capital already committed to its development, it is expected that the growth of the area will be sustained. As mentioned before, this growth will be entirely recreation-oriented and consist of both recreation facilities themselves and support facilities

such as retail shops, restaurants, etc. There will be no industrial development in the immediate area as this is expressly prohibited by the restrictive covenants. The proposed highway will be used mainly to transport recreationists from Highway 191 to recreation facilities at the development.

The support facilities in the county appear to be, for the most part, adequate. Big Sky, Inc. has done a great deal of planning for facilities such as water and sewer. Power and telephone facilities have recently been expanded and are adequate for the future. However, satellite developments in the Canyon could present a problem as detailed in Chapter IV.

TRANSPORTATION REQUIREMENTS FOR DEVELOPMENT

As mentioned earlier, the proposed highway is the principal means of providing final transportation for users of the recreational facilities provided by the Big Sky Development. Except for special purposes, final transportation for all users of Big Sky facilities will have to be provided to the Meadow and Mountain Villages using surface transportation. Unless this final transportation is reasonably convenient and a comfortable form of transportation, use of the recreational and convention facilities will suffer significantly. The State and Gallatin County as well as the development corporation will pay the cost of the reduced use of these facilities. The cost to Montana and Gallatin County will be in the form of fewer jobs, less capital development, and a lower than expected level of tax collections. Providing a reasonably convenient and efficient interior surface transportation system is a necessary but not sufficient conditon for the development of a recreational complex such as Big Sky.

The environmental impact of even moderate traffic levels of inadequately

surfaced roads will be severe. Dust, noise, and perhaps most importantly safety of travellers will be all unfavorably impacted by lack of an adequate interior road system. In addition, an adequate road system would probably go a long ways toward insuring that there would be enough users at the facilities so that some forms of common carrier ground transportation system could be used within the recreational complex. Unless the total use of the facility is adequate, such common carrier systems would not be economically feasible. The total environmental impact on any ground travel must consider both the original construction and the on-going use of the road facilities. Road design which considers the environmental impact during the process of designs will go a long way toward minimizing environmental impact on the West Fork area of the intrusion of large numbers of people.

It is highly unlikely that the recreational development of Big Sky will be isolated from other developments. The possible undesirable impact of satellite developments has already been discussed. However, the development of additional recreational developments and facilities whose quality is every bit as good as Big Sky would probably have a less favorable impact. However, these developments will only take place once it has been determined that Big Sky is economically feasible. Therefore, a marginally successful Big Sky will probably have a highly undesirable impact in terms of influencing the development of satellite facilities which are inadequately planned and capitalized. Therefore, an adequate road system would probably also encourage satellite developments which were of a more desirable nature. Since success breeds success, future developments of the same general quality as Big Sky can only be expected if Big Sky in itself is a successful development.

PROJECTED GROWTH IN EMPLOYMENT AND PERSONAL INCOME

Projecting growth in employment into the future, even in the best of circumstances, must be considered as estimates, not prophecies. However, planning is necessary and planning requires estimates about likely future events. The projections below are based on what has been termed in this report as the most likely outcome. If such projections are used through time, they should obviously be updated as more information becomes available.

Table 5-1

TOTAL EMPLOYMENT PROJECTIONS

	1970	1975	1980	1990
Gallatin County	12,329	13,966	17,008	22,719
Bozeman	7,097	8,240	10,238	14,040
Rest of County	5,232	5,726	6,770	8,679

Total Personal Income is highly correlated with employment. Transfer payments and income from assets are important sources of personal income, but in regions like Montana, personal income from these sources is related to population which is in turn largely determined by employment opportunities. Because of the problem inherent in projecting inflation, these projections are made in terms of 1967 dollars.

Table 5-2

TOTAL PERSONAL INCOME PROJECTIONS
(1967 Dollars)

	1970	1975	1980	1990
Gallatin County	$80,804,000	$91,533,000	$111,147,000	$148,900,000

These projections are made on the basis of no real change in per capita personal income. This assumption is probably too conservative for reasons discussed in the next section.

INCREASE AVERAGE INCOME LEVELS

A county-wide survey of family income levels indicates that they are a bit low but that the increase over the last decade has kept pace with national growth in family income. One of the objectives of growth center highway funding is to help the area increase average wage levels. The Bureau of Business and Economic Research at the University of Montana has suggested that Montanans not look to recreation for economic development. The reasoning is this: recreation-generated jobs tend to be both seasonal and low-paying. Big Sky officials have stated that they are attempting to co-ordinate hiring so as to get as many year-around people as possible. This should eliminate some of the seasonality.

However, the major question here is level of wages. Judgement, combined with information from other ski areas (especially Sun Valley), indicates that the majority of recreation-oriented jobs will be in service capacities: as waitresses, maids, sales clerks, etc., areas which are traditionally low-paying. These are the long-run jobs. In the short-run, there will be a number of construction workers employed. These people do command relatively high wages, but work is seasonal and they will only be employed during the construction phase of the development.

One approach to estimating income effects of such a development is to estimate expenditures by both developers and users, and then use a multiplier to establish the total effect. However, at the present time, we really do not have the necessary information to establish gross income

multipliers for this type of development.

It is the opinion of this researcher that, at least in the long-run, both the Big Sky Development and the satellite development associated with it will bring money into the area but will do little to increase average wage levels.

Big Sky, Inc. will, however, contribute significantly to a broadening of the property tax base in both Madison and Gallatin Counties. The property tax provides almost 60% of the total state and local tax revenue and thus, changes in the tax base are important to residents of the area. If the total Big Sky master plan is completed, total selling prices of condominiums and costs of private homes, including land, plus total construction costs of all other facilities can be estimated at about $120 million at today's prices. Thus, the assessed value of the property would be about $48 million. Of this, approximately $20 million would be located in Gallatin County and $28 million in Madison County. This represents an increase of about 19 percent of 1970 valuation in Gallatin County and 100 percent in Madison County. If levies remain the same, the revenue generated would amount to about $1.1 million in Gallatin County and about $1.2 million in Madison County. How much of the master plan will be completed by 1980 is not known at this time.[24/]

MAINTAIN ENVIRONMENTAL QUALITY

One of the major attractions of an area such as Big Sky is scenic beauty and high-quality environment. In keeping with this, the developers have gone to a great deal of effort to adequately plan and to maintain the natural environment. The sanitary sewer system will be among the most sophisticated in the country. Water quality, as elsewhere in the Canyon,

is expected to be high. According to current information, effects on wildlife should be minimal, although the big horn sheep population north of Big Sky may suffer some from encroachment by elk.

If roads in the development are not paved, there may be some erosion problems. However, it is expected that Big Sky will attempt to minimize any problems which may arise.

Most anticipated environmental problems will occur outside the development itself. There will certainly be an increase in the volume of traffic on U.S. Highway 191. The extent of this increase is not known at this time and may not really be a problem, especially if Big Sky can develop an effective system of bus or limousine transportation to and from the area. Along with the increase in traffic, noise levels will undoubtedly increase some as will air pollution. However, these two factors are presently at such low levels that a considerable increase could be tolerated before they became problematic.

Probably the most serious threat to the area is in the satellite developments. If these are not adequately controlled, physical and visual pollution could easily result. Inadequate waste disposal (both sewage and solid waste) are foreseen as the most immediate problem areas. What actually happens will depend, to a large extent, upon the effectiveness of control measures.

FACILITATE UTILIZATION OF RESOURCES

Both human and natural resources are abundant in the area. Residents of the county are skilled and substantially above average in educational achievement. A study has been done which indicates that in 1960 underemployment was severe in Gallatin County (23.0% for males and 44.5% for females.)[25/]

This estimate of underutilization of the county's labor force was based on such income-determing factors as age distribution, labor force participation, and education and then comparing expected income based on these factors to actual income. It is virtually certain that this under-employment still exists; there simply are not enough skilled or professional jobs in the area. Although it is probably wide-spread, it does not necessarily indicate a depressed area. Instead, it is probably indicative of the fact that people are willing to take cuts in salary and job prestige in return for the opportunity to live in an area of natural beauty and clean environment.

Labor force participation rates are low and there are probably some non-workers who would work should the opportunity arise. However, it should be noted that these rates will remain lower than the national average as long as a substantial proportion of the area's population is comprised of college students.

Total employment in Gallatin County has increased substantially over the last decade. If the growth in employment continues at its present rate, an additional 4,000 + employees can be expected by 1980. Big Sky will provide some of these jobs. Officials at the resort estimate that eventually permanent employment will amount to approximately 150 to 200 people, but up to 300 or 350 employees would be needed during peak seasons. In the short run, during construction, approximately 230 people are employed, 200 of whom are in construction. Both long-run and short-run direct employment should generate additional jobs because of the multiplier effect.

IMPROVE THE QUALITY OF SERVICES

As discussed in Chapter IV, very few services are immediately available to Canyon residents; most must be obtained in Bozeman. Schooling is provided in the Canyon for grades 1-8 at the Ophir School, located approximately three miles south of Big Sky. Law enforcement is provided through the Gallatin County Sheriff's Office, headquartered in Bozeman. In 1970, fire protection service had been available only by agreement with the U.S. Forest Service. The service was requested by the individual property owner who then paid a fee for the protection. This protection, however, did not cover structures.

Electrical power and telephone service are available in the Canyon through the facilities of public utilities. However, as mentioned in Chapter IV, there are no public water or sewer facilities except at Forest Service campgrounds. In addition, there is no public refuse dump in the Canyon.

Gallatin Canyon has no local government, but is legally represented in governmental affairs by the Gallatin County Commissioners. There are local organizations through which residents can work to solve problems of particular interest to them. The most important of these is probably the Gallatin Canyon Real Property Owners Association, a non-profit community organization, founded in March, 1970. Concern about possible adverse effects accompanying the Big Sky Resort Development provided the impetus for organization. The major objective of the group has been to mobilize the land owners of the Canyon in an effort to safeguard the environment. Areas of concern include refuse disposal; zoning problems; fire and insurance; possible air, soil, and water pollution and other potential

deteriorating influences which could occur. Membership is open to all real property owners in the Canyon. It should be noted that the organization has had a number of difficulties and it remains to be seen whether or not it will be successful in reaching a consensus and promoting unified community action.

There is some feeling among Canyon residents that improved services are needed. Among these needed services are emergency first aid facilities, refuse disposal or establishment of a dump, and arrangements for fire protection or fire-fighting facilities. In response, emergency first aid classes were offered during the winter of 1971 to interested residents of the Canyon.

On the whole, because of their proximity to Bozeman, the services available to the people in the Canyon are probably better and closer than those available to many rural Americans, but, as noted above, there is certainly room for improvement. The increase in population due to the Big Sky Development will undoubtedly make the provision of additional services more feasible. In addition, Big Sky itself will provide some services which will be open to the public.

Because the development will not be a municipality in the traditional sense, it is difficult to predict exactly what services will develop. However, there are some things which can be enumerated at this time. Limited shopping facilities will be available at the development. A first aid station, which may eventually include a doctor on its staff, will be located at the base of Lone Mountain. In addition, the presence of Big Sky has made the establishment of a Canyon-wide volunteer fire department feasible. A solid waste disposal district may also be feasible at a later date.

In addition, there will be a number of leisure activities available to Canyon residents, including outdoor recreation and cultural activities. The corporation will have a movie theater and possibly some plays will be presented through the auspices of a repertory theater group. There will also be a number of restaurants and night clubs.

DECREASING OUT-MIGRATION - INCREASING IN-MIGRATION

One of the most important measures of growth trends is the recent change in migration patterns. The Gallatin County area is in an unusually favorable position, with an in-migration of 12.3% in a state which has experienced an increasing out-migration (8.6% between 1960 and 1970). This represents a significant indication of economic growth and strength in the area. The area is an attractive place in which to live, and, assuming economic development continues, people will continue to migrate in. Population projections and the recent flurry of building activity indicate that this will be the case.

FOOTNOTES

1/ This statement was made by the Gallatin County Committee for Rural Development, U.S.D.A., in its "Gallatin County - 1972 Situation Statement."

2/ Census classification changed in 1970 from previous classification of "Age 14 & Over" to "Age 16 & Over." Therefore, 1970 total employment figures were adjusted to include those in the 14-16 age group.

3/ There is some discrepancy as 1960 figures are for persons age 14 & over, while 1970 figures are for those 16 & over.

4/ Location-quotient testing of the figures for retail trade and services in Gallatin County against those for Montana does not show any significant difference. However, it is felt that this method might also be biased due to the fact that the areas which have the highest numbers of employed persons are those areas which are also regional trade centers (eg., Billings, Great Falls, Missoula) which could tend to distort figures for the state.

5/ Actual total employment was equal to 9,365 persons. However, 186 respondents did not report industry of employment. These 186 persons have been omitted from this analysis.

6/ Because of the nature of the census data, figures in this table are subject to some inconsistencies:

1) The 1960 Census counted all persons age 14 & over in preparing employment figures, while the 1970 Census counted only those 16 & over. However, only 200 14 and 15 year olds were employed in 1970, an error of less than two percent.

2) In determining government employment, figures must be estimated from two different tables. Because some government employees are counted, in the one case, under "Agriculture, Forestry, and Fisheries" and in the other, under "Government," these people are counted twice. It is estimated that this error is less than 5 percent.

3) To obtain the number of Federal and State employees in 1960, an estimation of local government employees was made from figures available in the 1957 and 1962 Census of Governments. Straight-line interpolation was used between the two figures.

Since the figures are intended merely to show trends, these inconsistencies can be considered minor. Some of the same problems are also present in Table 2-4.

6/ Figures for Gallatin County are obtained by totaling the figures in each category for all census divisions.

7/ Migration rate is the percent net migration is of the population at the beginning of the decade.

8/ Figures from state university placement departments indicate that approximately 90% of all graduates leave the area. Therefore, those students whose home is not in Gallatin County are treated as temporary, rather than permanent, residents. The figure shown in this category has been approximated by comparing 1970 figures for total enrollment at the school vs. non-resident enrollment. The figure thus determined was then adjusted downward to compensate for non-resident students over 25. This adjustment was made through a combination of census data and judgment.

9/ Actual mortality data by age are not available by county. Therefore, the national average rates were used to calculate a composite figure of 11.25 deaths per 1,000 during the ten-year period.

10/ Census data enumerate those persons living outside the county in 1965 and attending college in 1970. Those students in this category who were listed as living with parents were treated as residents and subtracted from the total to give the figure listed.

11/ Migration rate is the net migration divided by the natural increase.

12/ Source: Acting City Manager Robert Keyes in a telephone interview June 26, 1972.

13/ Source: Big Sky, Inc. President Gus Raaum in an interview June 13, 1972.

14/ Source: Gallatin Canyon Study Team, "The Impact of a Large Recreational Development Upon a Semi-Primitive Environment: A Case Study - 1971 Progress Report," Montana State University, 1971, p. 77.

15/ Source: Mr. Richard Johnson, Montana Power Company, in a telephone interview June 26, 1972.

16/ Source: Acting City Manager Robert Keyes in a telephone interview June 26, 1972.

17/ Source: Gallatin County Sanitarian Emory Nelson in a telephone interview June 26, 1972.

18/ Source: As above.

19/ Source: Jerry Navratil & William R. Lassey, Unpublished Report, "Government, Organization and Public Policy Issues: The Gallatin Canyon and Big Sky of Montana," as part of the Gallatin Canyon Study, Montana State University, 1972.

20/ Source: Ticket Agent, Amtrak Depot, Bozeman, Montana, in a telephone interview July 6, 1972.

21/ Source: Ticket Agent, Greyhound Bus Depot, Bozeman, Montana, in a telephone interview July 6, 1972.

22/ Source: 1972-74 Montana State University Bulletin, Montana State University, 1972.

23/ Source: Anne Williams, Unpublished Report, "Preliminary Interview Results," as part of the Gallatin Canyon Study, Montana State University, 1972.

24/ Source: Dr. Layton S. Thompson, Unpublished Report, "The Big Sky Recreational Complex - A Case Study of Consumptive Land Use," as part of the Gallatin Canyon Study, Montana State University, 1972.

25/ Source: Ronald E. Kampe and William A. Lindamood, Underemployment Estimates by County, United States, 1960, Agricultural Economic Report No. 166, Economic Research Service, USDA, 1969.

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